The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DAVID J. STACEY, SIMON BRUCKHEIMER, and FAI TSANG

Appeal No. 2005-1367
Application No. 09/416,679

ON BRIEF

Before HAIRSTON, BARRY, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 2, 3, 5-12, and 14-17, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to functional partitioning of an asynchronous transfer mode (ATM) common part sublayer (CPS)

adaptation device to enable different traffic services to be carried over different adaptation layers, and to support AAL2 switching. In particular, the device is functionally partitioned to provide scheduling, prioritization and multiplexing of ingress traffic to the broadband network independently of the adaptation layer (AAL) type of traffic, and incorporates a common memory for payload storage whereby to perform multiplexing at both the AAL and ATM layers. In addition, in an egress direction from the broadband network, a through path segregation and delineation of incoming data units is provided (specification, page 3).

Claim 12 is representative of the invention, and is reproduced as follows:

12. A method of interfacing a narrow band network and a broadband network via a common part sublayer (CPS) ATM adaptation device, the method comprising; in an ingress direction towards the broadband network, providing scheduling, prioritization and multiplexing of ingress traffic to the broadband network independently of the adaptation layer (AAL) type of that traffic, and, in an egress direction from the broadband network, providing on a through path segregation and delineation of incoming data units.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Westberg et al. (Westberg ('309))	5,946,309	Aug. 31, 1999
Westberg (Westberg('353))	6,195,353	Feb. 27, 2001 (filed May 6, 1997)

Claims 2, 3, 5-12, and 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Westberg ('309) in view of Westberg ('353).

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the answer (mailed September 10, 2004) for the examiner's complete reasoning in support of the rejection, and to the brief (filed February 12, 2004) and reply brief (filed November 15, 2004) for the appellants' arguments thereagainst.

Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii)(eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the

examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

We note at the outset appellants' statement (brief, page 4) that "[c]laims 2, 3, 5-12 & 14-17 can be considered as a group." Accordingly, we select independent claim 12, the broadest claim on appeal, as representative of the group. Turning to claim 12, we note as background, that in rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore

Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See (id.); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (answer, pages 4 and 5) is that the AAL-MUX 207 of figure 3 corresponds to the claimed "'CPS ATM adaptation device,'" and that AAL-demux 310 provides a through path for incoming data because Westberg does not mention whether the data is buffered in the AAL-demux 310. The examiner adds (answer, page 6) that "Westberg et al. does not expressly disclose the scheduling or prioritization of ingress traffic nor does Westberg et al. expressly disclose a common memory for payload storage for multiplexing ingress traffic." To overcome this deficiency of Westberg ('309), the examiner (id.) turns to Westberg for a teaching of "the use of memory for the ingress

path for storage that is used in the multiplexing, scheduling, and prioritization of data at the ATM and AAL layers." It is asserted (answer, page 7) that it would have been obvious to provide the system of Westberg ('309) with the ingress memory of Westberg ('353) to help implement the prioritization and scheduling functions taught by Westberg ('309).

Appellants' position (brief, page 7) is that Westberg ('309) provides no teaching with respect to how to partition an ATM adaptation layer device as claimed, and that Westberg ('309) does not explicitly mention buffering, but that an artisan would recognize that batch encoding of control information sent infrequently would have to precede the user data, which would require buffering on receipt.

It is further asserted (brief, page 8) that Westberg ('353) does not specify any CPS functionality, and, like Westberg ('309), does not teach the functional partition of a CPS adaptation device. It is argued, (id.), that Westberg ('353) pertains to a function of the AAL2 SSCS layer, not the CPS layer, and that neither Westberg ('309) nor Westberg ('353) teach the functional partitioning of a common sublayer adaptation device. It is further argued (brief, page 9) that "neither suggests nor even mentions the possibility that buffer apportionment can be

addressed with respect to the common part sublayer (CPS) ingress and egress paths of the ATM adaptation layer." In addition, appellants dispute the examiner's finding that since Westberg ('309) does not mention buffering the incoming data to the receiving station, that it can be considered as a through path. It is argued (id.) that "the complete absence in a prior art reference of any discussion of a feature as claimed in the invention cannot be said to have satisfied the test that the prior art reference teaches or suggests the feature. As already demonstrated in the foregoing, it is implicit to the teaching of Westberg '309 that control information must be buffered on receipt at a receiving station. At best, Westberg '309 can be said to be ambiguous with respect to this feature." It is additionally argued (id.) that Westberg ('353) does not teach the provision of a common memory for payload storage in the CPS ingress path in order to perform multiplexing at both the AAL and ATM layers.

We note at the outset that our review of the specification is hampered by the fact that the specification and drawings do not conform to U.S. standards of form and practice as there are no reference numerals anywhere in the specification and drawings

see MPEP § 608.01(g). However, we consider this to be a formal matter to be addressed by the examiner subsequent to the appeal.

Turning to the language of claim 12, we note that independent claim 12, unlike the other independent claims, does not recite functionally partitioning the CPS common part sublayer. Because other claims contain this limitation, we conclude that the absence of this language was intentional and that claim 12 is of broader scope than the other independent claims. In addition, we note that claim 12, unlike the other independent claims, does not recite that the ingress path includes a common memory for payload storage. However, claim 12 does recite "providing scheduling, prioritization and multiplexing of ingress traffic" and that the egress path provides a through path segregation and delineation of incoming data units.

Turning to the prior art, we find that Westberg ('309) is directed to a hybrid adaptation layer that avoids transmitting hybrid data over separate communication channels, but rather transports telecommunications data from multiple AALs over a common communications channel to maximize bandwidth utilization (col. 1, line 60 through col. 2, line 4). In particular (col. 2, lines 8-17), the method comprises the steps of "receiving

hybrid data from at least one telecommunication application, wherein the hybrid data comprises a plurality of data transfer formats; inserting data having a first data transfer format into at least one data packet; inserting data having a second data transfer format into at least one data packet; multiplexing the data packets into a single data stream; and transmitting the data packets to the receiving station over a common telecommunication channel, wherein all data packets exhibit a common data transfer protocol." Westberg ('309) further discloses AAL1, AALm and AAL5 adaptation layers (col. 1, lines 33-36). We find from this disclosure that Westberg ('309) reformats data from multiple AALs, inserts the data into packets, multiplexes the data packets into a single stream, and transmits the data packets to the receiving station. In contrast, Westberg ('353) is directed to using ATM for transporting low bit rate, circuit emulation data (synchronous data, from one or more circuit emulation connections (col. 1, lines 7-11). The invention of Westberg ('353) is essentially an enhanced version of AAL2 (col. 2, lines 29 and 30). Westberg ('353) further discloses that AALm is the same as AAL2 (col. 2, lines 11 and 12). The invention of Westberg ('353) is achieved by replacing the AAL 101 of figure 1 with a circuit emulation adaption layer 305 and a short packet multiplexing

layer 310, as shown in figure 3 (col. 2, lines 32-35). Westberg ('353) further discloses that short packet multiplexer 565 multiplexes the short packets as determined by a programmed priority schedule, which defines the relative transmission priority for each short packet to increase bandwidth allocation (col. 4, lines 54-60).

From the disclosure of Westberg ('353), we find reference to multiplexing being determined by a programmed priority schedule. From the disclosure of Westberg ('309) of using AALm in addition to AAL 1 and AAL5, and the disclosure of Westberg ('353) of an enhanced version of AAL2, we find that an artisan would have been taught to provide Westberg ('309) with the enhanced AAL2 (AALm) of Westberg ('353). However, upon making the modification, the claim would still not have been met because the claim additionally recites that the prioritization and scheduling is independent of the AAL traffic type used. Thus, even if the AALm of Westberg ('309) included logical partitioning for prioritization and scheduling, we find no teaching or disclosure to also apply the prioritization and scheduling of enhanced AAL2 to AAL1 or AAL5. Accordingly, even if we combined the teachings of Westberg ('309) with Westberg ('353) as advanced by the

examiner, the limitations of claim 12 would still not have been met.

However, even if, assuming arguendo, we agreed with the examiner as to the obviousness of providing Westberg ('309) with the scheduling and prioritization of Westberg ('353), and even if we agreed with the examiner that AA1 mux 207 met the claimed common part sublayer (CPS) ATM adaptation device, and that the combination would result in logical partitioning for prioritization and scheduling, claim 12 would still not be met for the reasons which follow. Westberg ('309), is silent as to buffering as the egress portion. The fact that the reference is silent as to a buffer in the egress direction is not a disclosure of a through path. Since the reference is silent as to the lack of a buffer, in order for us to find that there is no buffer, but rather a through path, the through path must be inherent in the reference. From the lack of any disclosure to the effect that there is no buffer or of there being a through path, we find that the standard for inherency has not been met. Inherency cannot be established by possibilities or probabilities, but must necessarily flow from the teachings of the reference. The examiner's finding that the reference's silence as to the presence or lack of presence of a buffer in the egress direction

from the broadband network, is a disclosure of a through path, we find that there is insufficient evidence in the record to support the examiner's position.

From all of the above, we find that the examiner has failed to establish a prima facie case of obviousness of claim 12. Accordingly, the rejection of claim 12, as well as claims 2, 3, 5-11 and 14-17, which are narrower in scope, is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 2, 3, 5-12, and 14-17 under 35 U.S.C. § 103(a) is REVERSED.

REVERSED

KENNETH W. HAIRSTON)
Administrative Patent Judge)
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